

Particulars of Ground to be traversed (vide Plan and Section attached).

A to B—Length, $3\frac{1}{2}$ miles.—The road will traverse river-flats and islands covered with light scorb or grass. No construction is necessary, but across one or two of these islands 20 chains of scrub-cutting may be required.

B to C—Length, $1\frac{1}{4}$ miles.—Over or around a rocky gorge covered with a few feet of loamy soil, and involving clearing 33 feet wide, formation 9 feet, and metalling 6 feet wide.

C to D—Length, $2\frac{1}{4}$ miles.—Over river-flats, &c., requiring neither forming nor metalling. As at A to B, a few chains of scrub- or bush-cutting may be required to keep clear of flood-water in back channels. Long Ford is a permanent and good ford, available, excepting during floods, all the year round.

D to E—Length, 6 miles.—Bush-clearing 33 feet wide, and forming 9 feet wide throughout. Metalling will be required here and there; total length of metalling probably not exceeding 3 miles.

E to F—Length, 2 miles.—Clearing and forming throughout, metalling of parts of it only. This section will also involve a little blasting where passing the gorge.

The upper ford of Pass River (at E) is one of the best fords of that river, practicable when most of the other fords are absolutely dangerous.

At F also is a ford, called Lower Ford on plan, which, however, is dangerous during the summer months, and hence the necessity of extending the road up to the Upper Ford. The road should of course be connected with the Lower Ford, so as to enable drovers, &c., to cross there whenever the state of the river allows of its being done. Travelling over an additional 4 miles of road will thereby be saved.

F to G—Length, 6 miles.—Requiring clearing and forming throughout, and metalling for the greater part of the distance. I am also prepared to meet with a few rocky points along the sidelings, where blasting will have to be done. The grade of this section will be steeper than that of any of the others; 1 in 10, I am sure, can be obtained; but I have hopes to be able to increase the distance, and so ease the grade proportionally.

G to H—Length, 2 miles.—Involving neither clearing nor metalling, but formation only. At a few points also a little rock-blasting will be found necessary.

H to I—Length, 3 miles.—These 3 miles comprise the most difficult and expensive work of the whole road, and involve rock-cutting to a more or less extent along their entire length. The whole of that portion of Agassiz Range is rock—the north side of Cannon Creek as well as the south side, and the former is far more steep and unfavourable to road-construction than the latter. Moreover the chances of taking the road down Cannon Creek are absolutely *nil*. This creek is for nearly two miles bounded by the perpendicular wall of a solid rock gorge, ranging from 300 to 1,000 feet in height. It is true we ascended in Cannon Creek, but would not have dared to do so if we had not been favoured with so long a continuance of fine weather. As it was we had to cross and recross this mountain torrent fifteen to twenty times, and with three solitary exceptions this could only be done by joining hands and getting what assistance and support were available to prevent being swept off one's feet and being carried amongst the seething waters. When examining Agassiz Range from below, where we camped in Mathias River, I had hoped to be able to descend from the saddle into the Mathias River in an almost southerly direction, so avoiding the rocky spur of Cannon Creek altogether, but, when I reached the saddle, and got a full view of the height of this rocky spur, which is running from it to the mouth of Cannon Creek on its south side, I at once abandoned that idea; nor do I now think it would be advisable to adopt that course, even if the formation of Agassiz Range was favourable to it. Mathias Saddle I found higher than has been reported; I make it 4,280 feet (aneroid observation), or about 680 feet above the snow-line on that side of the dividing range. To get below this line (below 3,600 feet) as soon as possible is of paramount importance, and that object could not be gained by following Agassiz Range in a southerly direction, as at first contemplated, while it will be gained most expeditiously by grading along the above-described rocky spur, at 1 in 17, or even less, if the ledges, of which there are many running around said spur, prove favourable. Both Mathias Saddle and Frew's Creek Saddle are sharp razor-back saddles, and the facilities to descend rapidly from these to below the snow-line are as good as they could be. The rock-cutting provided for on this section only covers a fairway of 7 feet, and stonewalling, wherever the precipitous nature of the sidelings calls for precautions being taken against accidents.

I to K—Length, 3 miles.—In my estimate for this section I have provided for rock-cutting for the greater part of its length, but I believe that more than half will prove to be ordinary sideling-cutting only.

K to L—Length, 2 miles.—Involving ordinary sideling-cutting only.

L to M—Length, $1\frac{1}{2}$ miles.—Across Mathias River and over ordinary river shingle. The fords thereabout are numerous and easy, and no road-construction whatever will be required.

M to N—Length, 1 mile.—Around a rough and rocky limestone knoll, with holes (as they always occur in limestone districts) in abundance. Will require thorough good forming and, probably, metalling throughout.

N to O—Length, 6 miles.—Traversing well grass downs, with ground firm and solid. The ascents and descents at terraces and creek-crossings need be formed, and the road-line throughout should be pared, and tussocks, spaniards, and wild irishmen removed therefrom for width of, say, 10 feet.